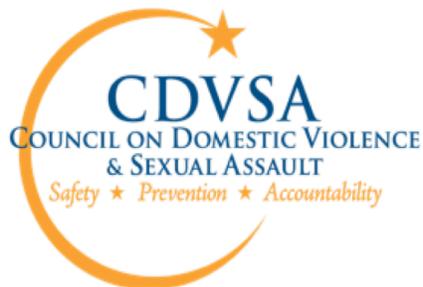


ALASKA FOURTH R CURRICULUM EVALUATION

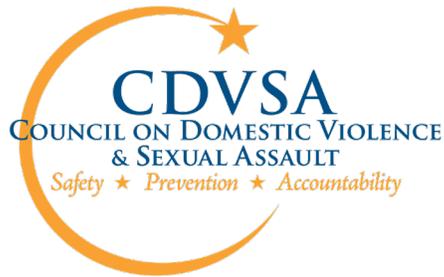
Findings Report 2011 – 2014



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ALASKA FOURTH R CURRICULUM EVALUATION

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ALASKA FOURTH R CURRICULUM EVALUATION

Findings Report 2011 – 2014

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This Findings Report is 1 of 2 reports produced. Please see the accompanying Technical Report for detailed information on study methodology and analyses.

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- Kami Moore: Adaptation of the Fourth R in Alaska

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EXECUTIVE SUMMARY

The Alaska Fourth R Curriculum Evaluation Project was a three-year, multi-site program evaluation conducted by Strategic Prevention Solutions, in collaboration with organizational partners within Alaska² and funded by the Governor's *Choose Respect* Initiative in partnership with the State of Alaska, Council on Domestic Violence and Sexual Assault. The purpose of this evaluation study was to assess the impact and implementation of the Fourth R Healthy Relationships curriculum in geographically diverse school districts in Alaska. Specifically, we used a pre/post/follow-up design to determine if youth who participated in the Fourth R curriculum improved their applied knowledge, attitudes, behavioral intentions and behaviors, and increased protective factors more than youth who participated in a regular health class.

Over 500 ninth graders in thirteen schools across twelve communities in Alaska participated in this study. Six of these schools implemented the Fourth R curriculum, while the remaining seven schools implemented their regular health class and served as a comparison group. Both quantitative and qualitative findings tell the story that youth who participated in the Fourth R experienced positive improvements.

Youth who participated in the Fourth R were statistically significantly different than comparison group youth in:

- ✓ Improved awareness of abusive behavior
- ✓ Reduced adherence to rape myths
- ✓ Increased positive social support among youth with high ACE scores

And were trending toward statistical difference in:

- ✓ Reduced acceptance of physical aggression

Qualitative findings were used to augment the quantitative data and identify program impacts. Methodological challenges are highlighted in the accompanying Technical Report. In general, youth scored highly on some of the outcomes at pre-test (such as applied knowledge), which limited our ability to find statistically significant differences from pre-test to post-test.

Interestingly, a high number of youth who participated in this study reported having experienced four or more adverse childhood experiences (ACEs) in their lifetime. For a number of the study outcomes, we found that youth who had experienced more ACEs were more significantly impacted by the Fourth R program than youth who had not participated in the Fourth R. This finding aligns with the current proposition within prevention science indicating that youth who are at a higher risk for adverse outcomes may benefit the most from socio-emotional programming³.

Overall, teachers and students benefitted from the Fourth R curriculum, and provided rich examples of how students were using the Fourth R lessons in their real lives (outside of the classroom). Teachers who implemented the curriculum using the interactive materials offered by the Fourth R also reported that they preferred using the Fourth R to their regular health class curriculum. Although methodological constraints limited the number of statistically significant findings, overall,

² Partners included: Alaska Network on Domestic Violence and Sexual Assault; State of Alaska, Council on Domestic Violence and Sexual Assault; State of Alaska, Department of Education & Early Development; State of Alaska, Department of Health and Social Services, Division of Public Health, Section of Women's, Children's and Family Health; and the University of Western Ontario in London, Ontario, Canada.

³ O'Keefe, M. (2005, April). *Teen Dating Violence: A Review of Risk Factors and Prevention Efforts*. Harrisburg, PA: VAWnet, a project of the National Resource Center on Domestic Violence/Pennsylvania Coalition Against Domestic Violence. Retrieved month/day/year, from: <http://www.vawnet.org>

results are positive and show that the Fourth R has distinct promise for improving the health and well-being of Alaska's adolescents.

BACKGROUND & INTRODUCTION

The Alaska Fourth R Curriculum Evaluation Project was a three-year, multi-site program evaluation conducted by Strategic Prevention Solutions (SPS), who was contracted by the Alaska Network on Domestic Violence and Sexual Assault (ANDVSA) with funds received from the Governor's *Choose Respect* Initiative and in partnership with the State of Alaska, Council on Domestic Violence and Sexual Assault (CDVSA). Additional organizational partners included the State of Alaska, Department of Education & Early Development (EED); State of Alaska, Department of Health and Social Services (DHSS), Division of Public Health (DPH), Section of Women's, Children's and Family Health; and the University of Western Ontario in London, Ontario, Canada. Personnel from each of the listed organizational partners participated in weekly "Evaluation Team" meetings throughout the project and provided direction for this evaluation. The Fourth R curriculum had previously been evaluated in Canadian schools and is listed in the United States on the Substance Abuse Mental Health Services Administration (SAMHSA) National Registry of Evidenced-based Programs and Practices (www.nrepp.samhsa.gov). The purpose of this evaluation study was to assess the impact and process of implementing the Fourth R curriculum in geographically diverse school districts in Alaska.

The Fourth R Curriculum

While a number of school-based dating violence prevention programs have been created, only a handful of programs have been systematically evaluated, with even fewer found to be effective^{4,5,6}. A 2007 review of the literature concluded that the evaluation base was in need of improvement, and that effective prevention programs are not only essential to preventing the immediate display of violence in adolescent relationships, but are also important in terms of preventing future violent relationships⁷.

A 2004 review of teen dating violence (TDV) prevention programs/curricula came to the conclusion that multi-session prevention programming may have a positive impact on knowledge but not necessarily on attitudes, which may occur because many TDV prevention programs are not truly comprehensive in scope, and do not work to reduce the multiple risk factors that exist beyond the individual level (e.g., at the community and relationship levels)⁸. The Fourth R Curriculum provides such a comprehensive approach.

The *Fourth R: Skills for Youth Relationships* curriculum uses a comprehensive prevention approach to promote healthy relationships and address concurrent, related adolescent risk behaviors. The Fourth R incorporates key characteristics of effective practices in youth violence prevention that have been identified in numerous systematic evidence reviews including the *Surgeon General's Report*, the *Blueprints Violence Prevention Initiative* and the *Preventing Intimate Partner And Sexual Violence Against Women* guide published by the World Health Organization. Characteristics that the Fourth R shares

⁴ Kellerman, A., Fuqua-Whitley, D., Rivara, F., & Mercy, J. (1998). Preventing youth violence: What works? *Annual Review of Public Health, 19*, 271-292.

⁵ Twemlow, S. W., Fonagy, P., Sacco, F. C., Gies, M. L., Evans, R., & Ewbank, R. (2001). Creating a peaceful school learning environment: A controlled study of an elementary school intervention to reduce violence. *American Journal of Psychiatry, 158*, 808-810.

⁶ Leen, E., et al., Prevalence, dynamic risk factors and the efficacy of primary interventions for adolescent dating violence: An international review, *Aggression and Violent Behavior* (2012), <http://dx.doi.org/10.1016/j.avb.2012.11.015>.

⁷ Cornelius, T. L. & Resseguie, N. (2007). Primary and secondary prevention programs for dating violence: A review of the literature. *Aggression and Violent Behavior, 12*. 364-375.

⁸ Hickman, L., Jaycox, L. & Aronoff, J. (2004). Dating violence among adolescents: prevalence, gender distribution and prevention program effectiveness. *Trauma, Violence and Abuse, 5*(2). 123-142.

with other successful programs are that it is comprehensive in nature, emphasizes skill development, and addresses the larger context of risk and protective factors that may impact perpetration of dating violence. The Fourth R is a three-unit relationship-based curriculum for grades 7-9, designed to be embedded in school-based physical and health education (the program evaluation described in this report only includes the grade 9 version of the program). The Fourth R curriculum was originally developed in Ontario, Canada, and is implemented in more than 4500 schools across Canada. The core of the program is skill development within a relationship context. The program offers co-educational opportunities to discuss relationship and violence issues – opportunities that have been identified as critical components of dating violence prevention – as well as the option of providing gender-specific activities⁹. The Fourth R also provides significant skill development opportunities for teachers, in recognition that there is considerable variation in teachers' level of awareness, comfort level, and skills with regard to gendered violence.

The Fourth R Curriculum and Social and Emotional Learning (SEL)

A distinguishing feature of the Fourth R curriculum is its focus on improving the social and emotional learning (SEL) of students. In the past, health education has too strongly emphasized the negative behaviors that youth should avoid, and has omitted discussion of the assets that youth can build. Focusing on positive youth development goes beyond avoiding negative outcomes and centers on building strong, core capacities among adolescents. In the field of education, an emphasis on SEL has emerged, emphasizing the processes through which children and adults attain these core capacities that are critical to positive development. SEL involves the processes through which children and adults acquire and effectively apply the knowledge, attitudes and skills necessary to understand and manage emotions, set and achieve positive goals, feel and show empathy for others, establish and maintain positive relationships, and make responsible decisions (Collaborative for Academic, Social, and Emotional Learning, 2013). Students who have strong social and emotional skills have more positive relationships with peers and adults, and have more positive emotional adjustment and mental health. **Students in schools that implement specific SEL curricula perform better academically than their peers in schools without such programs**¹⁰. The five SEL competency domains, as defined by the Collaborative for Social and Emotional Learning (CASEL, www.casel.org) are: self-awareness, self-management, social awareness, relationship skills and responsible decision-making.

The activities in the Fourth R curriculum are designed to facilitate the development of certain SEL competencies. The table below provides examples of how these competencies are developed within the Fourth R program. Although the activities have been aligned to SEL objectives in this table, we note that knowledge and attitude outcomes are also addressed within these activities. The Fourth R Grade 9 Logic Model (see accompanying Technical Report) also connects curriculum SEL outcomes with activities. A more detailed description of the ways in which the Fourth R addresses SEL objectives is available in the implementation manual¹¹.

⁹ Kendall-Tackett, K. A., & Giacomoni, S. M. (2007). *Intimate partner violence*. Kingston, NJ: Civic Evaluation Institute.

¹⁰ Durlak, J. A., Weissberg, R. P., Dymnicki, A. B., Taylor, R. D. and Schellinger, K. B. (2011), The Impact of Enhancing Students' Social and Emotional Learning: A Meta-Analysis of School-Based Universal Interventions. *Child Development*, 82: 405–432.

¹¹ Crooks, C. V., Zwarych, S., Burns, S., & Hughes, R. (2014). *The Fourth R Implementation Manual: Building for Success from Adoption to Sustainability*. London, ON: CAMH Centre for Prevention Science.

SEL Outcome Domain	Examples in the Fourth R Curriculum
Sense of Belonging	<p>Active Listening – Skill Building: The primary purpose of this activity is to foster a safe space for sharing and learning by building active listening skills among youth. In such an environment, youth have more confidence to share openly with their peers. Four key strategies to positive active listening are introduced to students. Then, students are given a topic to discuss and put into pairs to practice the active listening strategies they just learned. As students take turns actively listening to their partner, the teacher walks around to listen and coach students while they practice.</p>
Self-Awareness	<p>Rights and Responsibilities when Ending a Friendship/Relationship – Collaborative Brainstorming: This activity uses a pair-based, collaborative brainstorming session to help youth identify what they feel their rights and responsibilities are when they end friendships and relationships. The activity encourages youth to think about this situation from the perspectives of the various people involved: the person ending the friendship/relationship, the person who has had their friendship/relationship ended, the friend of someone who is ending the friendship/relationship, and the friend of the person whose friendship/relationships was ended. The goal is to encourage perspective-taking and make youth aware of the importance of taking responsibility for their actions in break-up situations.</p>
Self-Management	<p>Healthy/Unhealthy Relationships – Look Like, Sound Like, Feel Like Post It Pile It: In this activity, students work in small groups to review what healthy and unhealthy relationships look, sound and feel like. The class is divided into small groups and each student is given a small package of post-it notes. The teacher then reads a statement aloud, such as “a healthy relationship looks like...” and students are given a couple of minutes to record all their ideas on individual post-it notes. After the allotted amount of time, responses are taken up within each small group, and then collated and shared aloud with the larger group. The process repeats until all words that come to mind for how healthy and unhealthy relationships look, sound and feel are brainstormed. This activity encourages youth to identify the kinds of relationships they are currently in while highlighting qualities/characteristics that they want to look for in new relationships.</p>
Social Awareness	<p>Power as a Contributor to Unhealthy Relationships – Values Continuum and Fold the Line: In this activity, youth are asked to consider how power can be a potential contributor to violence. To start, an imaginary continuum is identified in the room with “good” at one end and “bad” at the other end. Students are then asked to stand along the continuum based on their opinion about whether power is a good or bad thing. Once students are on the continuum, standing shoulder to shoulder, the line is folded, so that the person who stood at the furthest end is now paired with the student at the exact opposite end. With the person standing across from them, students are given a chance to discuss why they chose to stand in their spot on the continuum. After a couple of minutes, time is provided for pairs to tell the larger group their perspectives on power contributing to violence and unhealthy relationships. The activity is designed to provide youth with an opportunity to have a conversation about power, identify how it can be used positively and negatively and recognize how power can contribute to unhealthy relationships.</p>

Relationship Skills	Skill-Building: There are various activities throughout the program that are designed to build skills. Skills in the Fourth R are taught in a practice-based format: a skill or technique is introduced and discussed and then youth are given a variety of scenarios and situations in which they can practice using the skill with their peers. In this format, a model for role-plays is typically presented, followed by time for students to practice writing responses before moving to oral responses. Some examples of skills that are taught in the program include: apologizing, communicating assertively and using delay, negotiation, and refusal skills in pressure situations.
Responsible Decision-Making	Substance Use & Abuse – Four Corners: The Four Corners activity is intended to help youth quickly identify their personal views about substance use and abuse. Posters are hung in each of the four corners/walls of the room that read: Absolutely, No Way, Yes But..., and No But.... A statement is read aloud and students first think independently, then move to the poster with the response that best matches how they feel about the statement. Once all students have chosen a poster to stand under, time is provided for the group at each poster to discuss why they are standing at that location. Once each group has shared among themselves, the teacher facilitates a larger group discussion by having each of the four groups share their thoughts. At this point, an opportunity is provided for students to change spots if their views have changed after hearing their classmates' perspectives. The goal is to provide youth insight into their own thoughts and beliefs about substance use and abuse.

Implementation of the Fourth R in Alaska

This evaluation assessed the impact of the adapted core version of the Fourth R curriculum. Since 2009, key personnel on the Evaluation Team have collaborated with the developers of the Fourth R curriculum to adapt the Fourth R for use with students in Alaska. Lori Grassgreen, Director of Prevention at the Alaska Network on Domestic Violence and Sexual Assault, worked with Claire Crooks, of the University of Western Ontario to develop a process to outline key considerations for Fourth R adaptations. Alaskan community groups and other key stakeholders were identified as "key informants" for specific topical or contextual components of the Fourth R curriculum adaptation. Key informants included Tribal leaders, domestic and sexual violence service program staff, teachers, and several other community members who reviewed the curriculum and identified areas for adaptations. After beginning to use the curriculum in the classroom and hosting committee discussions, key personnel from the Evaluation Team identified several areas for Alaska-specific adaptations. Based on a "wish list" of feedback from key informants and teachers using the curriculum, example lessons and questions were sent out to key informants. To more closely reflect the Alaskan story, the data and resources highlighted in the curriculum were updated to Alaskan data, and changes were made to the role-play scripts to align more closely with communities and the lived experiences of students in Alaska. While most adaptations were centered on updating existing content, key adaptations were made to include more activities and resources around personal safety and dating relationships. This included the addition of the Power and Control Wheel and the Equality Wheel to help give students a more in-depth understanding of the dynamics of relationships. In addition, safety planning and resources for how to help a friend were included to ensure students had the skills to keep themselves and others safe. The adaptations for the Fourth R curriculum are ongoing and EED continues to work with teachers to increase the success of the Fourth R by ensuring that teacher feedback is considered and that schools are involved in the process.

EVALUATION STUDY METHODOLOGY

This study involved participation by over 500 youth between the ages of 12-17 (predominantly 9th grade students) in twelve communities across the state of Alaska. The evaluation utilized a between-group pre/post/follow-up design. Data was collected from 2011 through 2013, and included a student survey, student focus groups, teacher interviews and implementation tracking.

Please see the accompanying Technical Report for detail on:

- Measurement development
- Evaluation design
- Ethics and Institutional Review Board process
- Participants
- Quantitative and Qualitative Measures, including Youth Survey development
- Data Collection Procedures
- Data Analysis
- Limitations

We would like to acknowledge the participation of the following schools in the Fourth R Evaluation Project:

Table 1: Participating Schools

Group	Community	School
Intervention (Implemented Fourth R)	Bethel	Bethel High School
	Kodiak	Kodiak High School
	Kotzebue	Kotzebue High School
	Dillingham	Dillingham High School
	Cordova	Cordova High School
	Homer	Homer High School
Comparison	Wrangell	Wrangell High School
	Juneau	Juneau Douglas High School
	Juneau	Thunder Mountain High School
	Barrow	Barrow High School
	Kenai	Kenai Central High School
	Soldotna	Soldotna High School
	Valdez	Valdez High School

FINDINGS

The findings included in this report are separated into two sections:

Section 1: Key findings related to program outcomes; and

Section 2: Key findings about the implementation of the Fourth R curriculum.

Both sets of findings tell the story of the effectiveness of the Fourth R curriculum when implemented in the Alaska schools that participated in this study. It is important to note that for both the quantitative and qualitative findings, a series of analyses were undertaken to ensure that the data were analyzed in the most appropriate way possible. Please refer to the accompanying Technical Report for more detail on the specific analyses used and steps followed.

Section 1: Key Findings Related to Program Outcomes

This study assessed whether the Fourth R curriculum resulted in the following hypothesized outcomes among participants:

Table 2: Fourth R Alaska Evaluation Study Outcomes

Outcome	Description
Attitudes	Youth who participate in the Fourth R will develop a greater awareness of a range of abusive behaviors and are less likely to endorse violence and rape myths.
Applied Knowledge	Youth who participate in the Fourth R will learn more about healthy relationships, violence and related risk behaviors than youth in regular health class. They will also show evidence of applied knowledge in terms of being able to describe how they would/have utilized Fourth R concepts and skills in real life.
Behavioral Intentions and Behaviors	Youth who participate in the Fourth R will report a higher likelihood of seeking help from an appropriate adult if they experienced dating violence, and intentions to intervene in potentially abusive situations as a prosocial bystander. Additionally, youth in the Fourth R will report engaging in prosocial bystander behaviors at higher rates, and report lower rates of violence perpetration.
Protective Factors	Youth who participate in the Fourth R will experience positive social support from other youth and adults.

The findings for each outcome are presented in subsequent pages. Within each section, qualitative information from the youth surveys and teacher interviews is integrated. Although the main purpose of the qualitative data was process evaluation (not outcome evaluation), many of the emerging examples and themes converge with the quantitative findings and/or provide a richer picture of the program impact, particularly in areas where the quantitative measurement was limited.

A Significant Interaction: Adverse Childhood Experiences

When reading the findings of this evaluation study, it is important to note the importance of the interaction of student ACE scores with program impacts. ACE scores emerged as an important moderator of Fourth R program outcomes, and therefore, are presented along with every outcome in this report. One of the outstanding features of this study was the collection of Adverse Childhood Experience (ACE) data from Alaskan 9th graders. National ACE study findings suggest that certain life experiences are major risk factors for the leading causes of illness and death as well as poor quality of life¹². The Alaska Fourth R Evaluation study asked youth to report if they had ever experienced the following ACEs¹³:

- Emotional Neglect
- Emotional Abuse
- Physical Neglect
- Physical Abuse
- Sexual Abuse
- Parental separation/divorce
- Household mental illness
- Household substance abuse
- Incarcerated household member.

In previous analyses for this study, students' ACE status was shown to interact with Fourth R program outcomes. Youth with high ACE scores have already experienced significantly high levels of violent and coercive interpersonal relationships, and showing program impacts with these youth has a significant public health impact. Given the interpersonal violence nature of many of the ACE items, Fourth R activities are particularly salient for and important to this group. Therefore, we initially analyzed the scale data (i.e., abuse awareness and help-seeking) to see if there were significant interaction effects with ACE scores. If a significant ACE x group effect (intervention vs. comparison group) emerged, then the results were interpreted with respect to four groups of youth:

1. Low ACE comparison youth
2. High ACE comparison youth
3. Low ACE Fourth R youth
4. High ACE Fourth R youth.

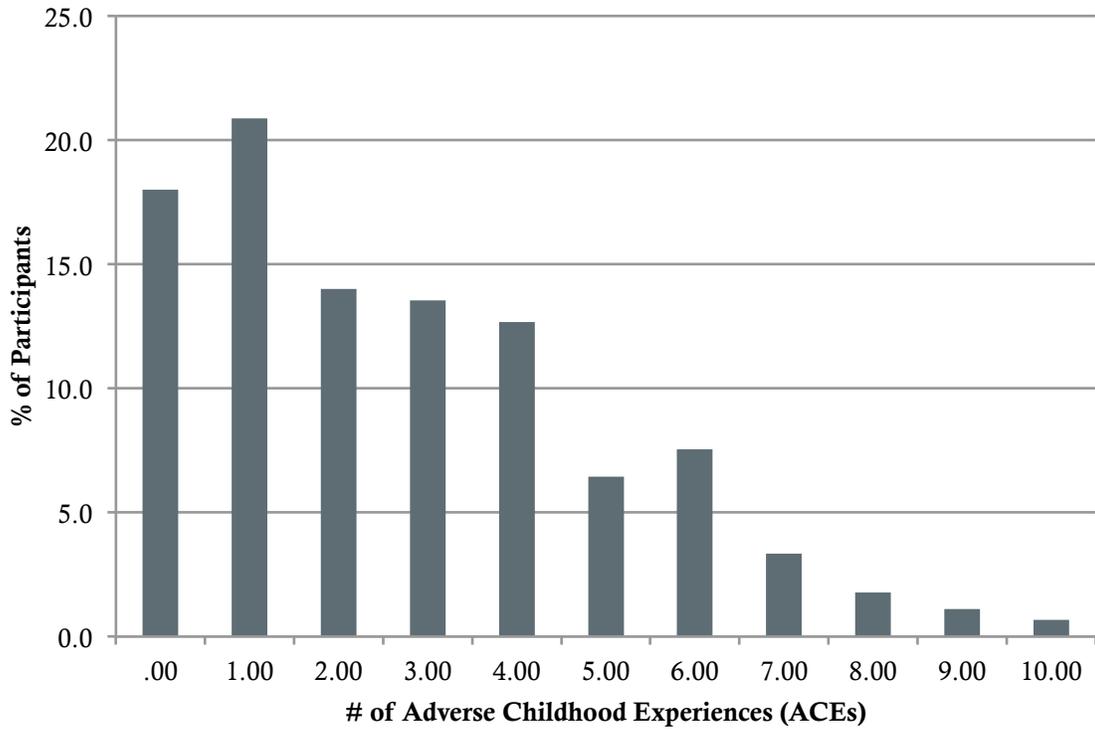
Marginal means were calculated for each of these four groups (i.e., means after controlling for covariates such as age and ethnicity) and significant subgroup differences are noted.

In considering the possible interaction of ACE scores with the program, it is important to note the high levels of adverse events reported by Alaskan youth. Figure 1 below shows that the majority of youth in this study reported they had experienced two or more adverse life events. ACE scores were dichotomized to look at youth who had experienced four or more adverse experiences. Overall, 33.4% of respondents ($n=151$) reported four or more adverse childhood experiences.

¹² ACE questions derive from the National ACE Study conducted by the Centers for Disease Control and Prevention and Kaiser Permanente's Health Appraisal Clinic in San Diego. Accessed online at www.cdc.gov/ace on August 7, 2013

¹³ Note: Not all ACEs national study questions were asked in the current study. However, wording of questions used is consistent with national study wording.

Figure 1: Percentage of respondents reporting adverse childhood experiences.



Main Results

Youth who participated in the Fourth R were statistically significantly different than comparison group youth in:

- ✓ Improved awareness of abusive behavior
- ✓ Reduced adherence to rape myths
- ✓ Increased positive social support among youth with high ACE scores

And were trending toward statistical difference in:

- ✓ Reduced acceptance of physical aggression

Statistical findings were corroborated with qualitative data, and qualitative data also showed additional positive outcomes of the Fourth R. The following sections describe detailed findings for each outcome. Additional information about measurement and limitations can be found in the accompanying Technical Report.

Attitudes

This study hypothesized that youth who participated in the Fourth R would develop a greater awareness of a range of abusive behaviors and would be less likely to endorse violence and rape myths compared to their peers who participated in regular health classes. Change in attitudes was measured using the abuse awareness scale, the attitudes towards physical aggression subscale and individual items, and items reflecting rape myths. Please see the Technical Report for more detail on measurement.

Abuse Awareness

Regression demonstrated a main effect for intervention in a positive direction, as well as a significant effect for sex (i.e., girls scored higher than boys overall). In other words, youth who participated in the Fourth R were significantly more likely to have improved their awareness of abuse when compared to youth who did not receive the Fourth R. Significant predictors of abuse awareness are shown in the table below, and the group coefficient indicates the statistical significance of the intervention condition. Other covariates (including ACE score, ethnicity or age) were not significantly associated with abuse awareness. There was no interaction effect between ACE and group for the abuse awareness scale, indicating that youth responded to the program similarly, regardless of whether they had high or low ACE scores.

Table 4: Significant Predictors Of Abuse Awareness At Post-Test

Predictor	Standardized Coefficient	t	Significance
Pre-test abuse awareness	.614	13.86	<.001
Sex of participant (female)	.095	2.14	<.05
Group (Fourth R)	.087	2.03	<.05

Violence Acceptance – Physical Aggression

The violence acceptance physical aggression scale included items such as, “*If there is a fight, people should try to break it up instead of watching it.*” On an item-level, there was a simple main effect. The item “*If I back down from a fight everyone will think I am a coward*” was significant at the trend level (see table 5 below) indicating that Fourth R students disagreed with that statement more than comparison youth did, when the group by male/female interaction was controlled for. The overall subscale did not show a significant interaction effect with ACE score or a significant main effect.

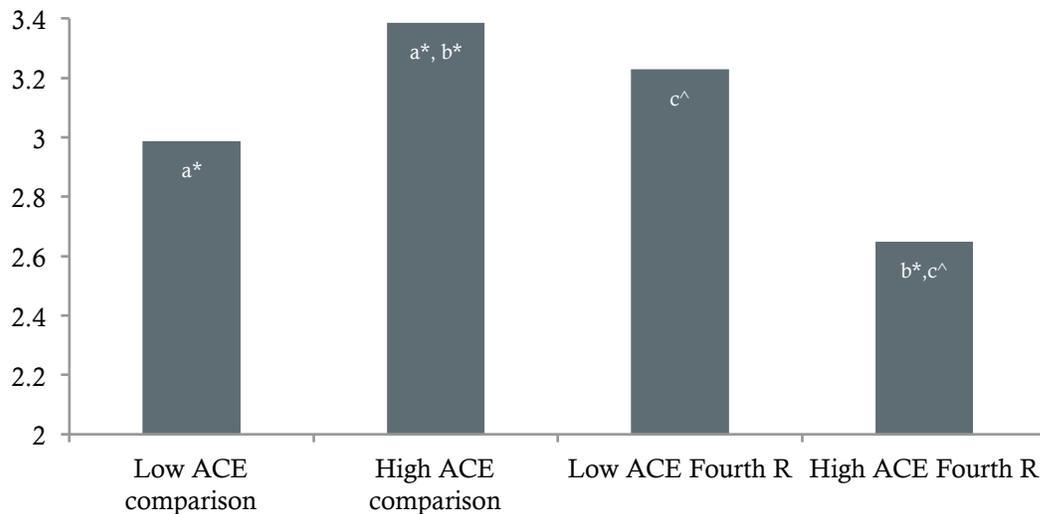
Table 5: Significant Predictors Of “If I Back Down From A Fight Everyone Will Think I’m A Coward” At Post-Test

Predictor	Standardized Coefficient	t	Significance
Pre-test attitude	.590	13.01	<.001
Sex of participant (female)	-.104	-1.89	<.1
Group (Fourth R)	-.111	-1.70	<.1

Rape myth: Girls sometimes call it “rape” when they regret having sex

Because the rape myth items did not form a scale, they were analyzed at the item (bivariate) level for group differences at pre- or post-test. Differences were found for the item measuring a common rape myth “Girls sometimes call it ‘rape’ when they regret having sex with someone,” which demonstrates a positive program effect, particularly for vulnerable youth (i.e., those with high ACE scores)¹⁴. Essentially, youth with higher ACE scores in the comparison group were more likely to endorse the negative attitude than youth with lower ACE scores in the comparison group youth. In addition, Fourth R youth with higher ACE scores were less likely to endorse the item than Fourth R youth with lower ACE scores. Finally, within the Fourth R youth, those with higher ACE scores showed more favorable attitudes (on this item) than those with low ACE scores at the beginning of the program (i.e., at a borderline (trend) level). Figure 2 below shows these group means and significant subgroup differences.

Figure 2. Agreement with Rape Myth Attitude Item



** = significant at $p < .01$ level, * = significant at $p < .05$ level, ^ = trending toward significance at $p < .10$

Qualitatively, many students in Fourth R implementation schools spoke about being more “aware” of signs of abusive relationships, characteristics of healthy relationships, substance abuse and safe sexual behaviors, however, focus group questions did not ask about specific attitudes regarding violence or rape myths.

¹⁴ Specifically, regression analysis found a significant ACE by group interaction, indicating that the program had a differential impact on low and high ACE youth. Marginal means were generated to compare the four different groups (i.e., the effects of age, sex, and ethnicity were partialled out).

Applied Knowledge

This study hypothesized that youth who participate in the Fourth R learn more about healthy relationships, violence and related risk behaviors than youth in regular health classes. It was also hypothesized that youth would show evidence of applied knowledge in terms of being able to describe how they would/have utilized Fourth R concepts and skills in real life.

The youth survey included four multiple-choice questions to assess knowledge. Table 3 shows that there were high levels of pre-test knowledge, and therefore no between group differences were found from pre to post.

Table 3: Pre- And Post-Test Scores For Knowledge Items By Intervention Group

Time	Mean (SD), intervention group	Mean (SD), comparison group	t (df)	n	p-value
Pre-test	3.24 (0.91)	3.19 (0.96)	-.54 (433)	435	.590
Post-test	3.40 (0.87)	3.32 (0.93)	-.76 (355)	357	.445

The high rates of pre-intervention knowledge indicate that the multiple-choice questions could have been crafted so as not to be confounded with students' understanding of the vocabulary words used in each statement. For example, if a student knows what the words "assertive" and "delay" mean in general, then she will be able to answer questions about assertive communication or using delay skills in response to peer pressure without it reflecting an actual increase in knowledge.

The concept of "applied knowledge" allows for analysis of knowledge improvement beyond multiple-choice survey questions. Applied knowledge looks at the way youth talk about the program, relationships, and reflect on what they think they learned. These dimensions of knowledge were better addressed in the focus groups and open-ended survey questions than in the quantitative measures in the youth surveys. Themes related to applied knowledge emphasized healthy relationships, personal development, and substance abuse.

Healthy Relationships: In focus groups, students from all Fourth R implementation schools mentioned that learning about healthy relationships would help them in real life when it came to dating relationships, friendships and family. Students shared that knowing the difference between healthy and unhealthy relationships is important "because sometimes people think a relationship is normal and it's abusive." Several other students shared a similar sentiment, explaining that their newfound understanding of healthy relationships would help them manage their own current relationships and those in the future. One student shared that learning about healthy relationships was the most important part of health class because "I am still young and I have not experienced [a relationship] and now by knowing how to stay in a good positive relationship, it can be helpful in future times."

"[The Fourth R] has taught me to know what I deserve in a relationship and about my rights to feel safe and secure. This knowledge has helped me make changes in my personal life for the better. I was able to apply what I learned, and I am happier and safer now that I have done so."

- Fourth R Student

Through prescribed role-play scenarios and other Fourth R activities, several students felt like they had practiced what a healthy relationship looks like and how to determine if a relationship is not healthy. Some students also spoke about mutual respect, effective communication with dating partners.

Several students also explained that a better understanding of healthy vs. unhealthy relationships would also help them with familial relationships and friendships. Some students felt like the class had given them tools for dealing with family problems and to help work through difficult situations or disagreements with friends, as well as helping a friend who may be in an unhealthy relationship.

Personal development: Several students explained that some of the lessons and the support of their teacher helped them to become more outgoing and confident. In particular, one student noted, “It has changed my positivity. Like, I speak up in class and participate more in school.” Another student learned that all students “have the right be comfortable being yourself.”

Substance abuse: Many students mentioned that they would use what they learned about drug and alcohol abuse to avoid using them in real life. Some students spoke about their newly acquired knowledge about drugs, alcohol and tobacco use that would help them make better decisions and to make sure friends made better choices.

“This class has changed the way I think a lot. I now understand that there are people that go through hard times, and it is important to be understanding and to treat everyone respectfully. I learned to also handle hard situations in a way that would not hurt anyone else or myself. I learned to be more respectful, and to also help others that need it.”

- Fourth R Student

Behavioral Intentions and Behaviors¹⁵

This study hypothesized that youth in the Fourth R would report a higher likelihood of seeking help from an appropriate adult if they experienced dating violence, and increased intentions to intervene in potentially abusive situations as a prosocial bystander. We also hypothesized that youth in the Fourth R would report engaging in prosocial bystander behaviors at higher rates.

Prosocial bystander behavior: The bystander behaviors did not produce statistically significant differences between the comparison and Fourth R groups. There may have been two measurement issues that made it difficult to find these effects. Please see the Technical Report for more detail. Qualitative themes emerged in both the student focus groups and the teacher interviews that indicate some impact. In focus groups, several students shared that as a result of the Fourth R, they are now more likely to intervene if they see something happening with a friend and they are more aware of their surroundings. Some students also felt like they were better equipped to help a friend who might be experiencing an unhealthy relationship, by telling them where they can go for help or stepping in if they see someone being bullied. Others spoke in general terms about “helping others.” Fourth R teachers commented that they noticed students were labeling friends’ relationships as unhealthy and seemed more comfortable talking about wanting to help their friends.

“[I learned] how to notice if somebody is in a bad situation or if you need help. Realizing more about other people and what you can do to help them instead of just pushing it off to the side for a moment and becoming a passive bystander.”

- Fourth R Student

When we asked teachers to comment on the perceived impact of the Fourth R on students, teachers listed students’ improved effective communication and conflict resolution skills (including negotiation, refusal and assertiveness skills), the use of a shared language, help-seeking behavior, and pregnancy prevention.

Effective communication/conflict resolution skills and knowledge: Students from five out of the six Fourth R implementation schools shared experiences about learning and practicing effective communication and conflict resolution skills. Several students shared that learning to be more assertive will help them in friendships and navigating other relationships and situations, including avoiding illegal substances, avoiding sexual risk in dating relationships and making decisions in general. Some students felt like the applied activities (including role-plays) helped them practice dealing with difficult situations. Specifically, many students spoke about using negotiation, refusal, delay, assertiveness and active listening skills to boost communication in dating and friend relationships, make better decisions and to get out of dangerous or risky situations (e.g. where substance abuse or other social pressures were present).

¹⁵ It was also hypothesized that youth would report lower rates of violence perpetration. Unfortunately, we were unable to statistically analyze changes in the rates of self-reported violence perpetration or victimization because those data could only be considered by using follow-up data, and there were significant difficulties regarding the completeness and reliability of those data, as discussed in the accompanying Technical Report.

Shared Language and Help-Seeking: The help-seeking scale did not show an interaction effect with ACEs scores, or main effect¹⁶. Although we did not find a statistically significant difference between Fourth R students and comparison students for help-seeking, there were examples from the teacher interviews where youth clearly approached an adult to discuss these issues because of their experience with the Fourth R program. Several teachers and students spoke about how they now talked and thought about the issues covered in the Fourth R (e.g., violence, healthy relationships, substance abuse, healthy sexuality) in a new or clearer way. One teacher spoke about how often students will go through lessons and then come back saying, “You know, I saw that in the hallway.” Teachers also heard students labeling bullying or other negative behaviors among their peers, having gained better tools through the Fourth R to recognize these actions. One teacher spoke about how the Fourth R gives students permission and support to reach out for help when they need it. He explained that students become very connected to the warning signs in abusive relationships and are then able to do something about those signs. Students could also better understand and look for qualities of a healthy relationship as a result of the Fourth R.

“I have learned that everyone can make a difference. I have issues in my life that I don’t share with a whole lot of my health teachers, but my health teacher has really opened my shell so I feel better about talking about what bothers me with others.”

- Fourth R Student

It is clear from student focus groups and teacher interviews that those who participate in the Fourth R develop a shared language around healthy and unhealthy relationships, identifying bullying or abusive behavior and effective communication skills.

Healthy Sexuality: Several Fourth R students thought they would use some lessons learned about practicing safe sex or abstinence in real life. Some also talked about the helpfulness of their communication skills when negotiating sexual activity.

“The other day the school nurse came in, and she goes ‘You know, there was a girl that talked to me, and she said this Fourth R unit really made her think about her current relationship’.”

- Fourth R Teacher

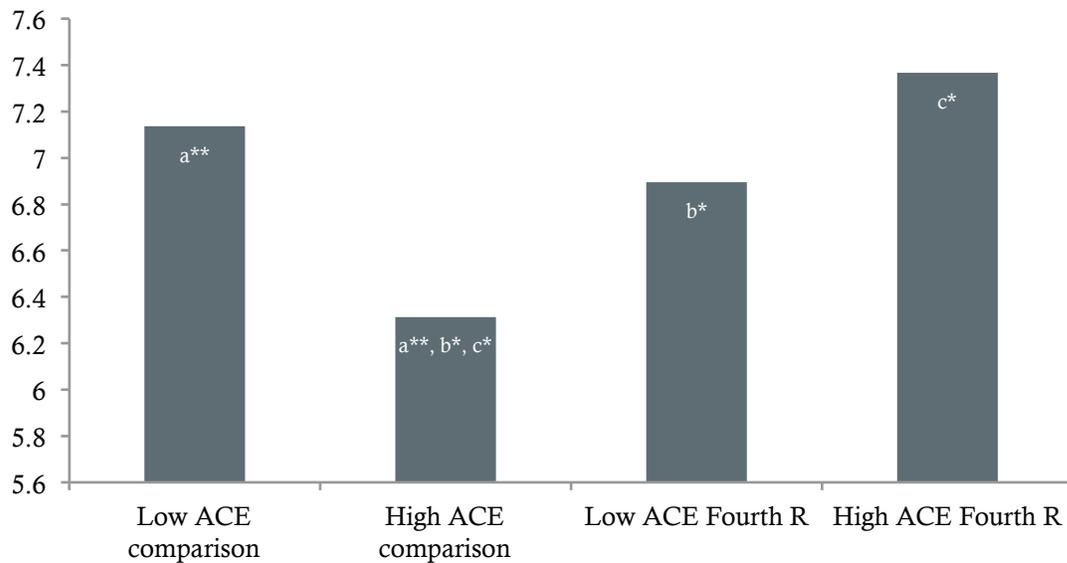
¹⁶ Further analyses were conducted by looking at the students who fell into the lowest quartile at pre-test (low pre-test help-seeking scores and high ACEs scores), but there was not a significant subgroup effect for those youth either. It is interesting that there was not a program effect on perceived likelihood of seeking help from adults, given that intervention youth (particularly those with high ACE scores) reported higher levels of helpful adult support post-intervention (see Protective Factors section).

Protective Factors

Finally, we hypothesized (as a secondary outcome) that youth who participate in the Fourth R would experience an increase in positive social support from other youth and adults. Two student survey items were used to measure positive peer support and three items measured positive adult support. Scores on each item were coded to indicate whether the youth had 0, 1-4, or 5+ individuals that met a particular support need (e.g., *How many friends do you have that you can trust with personal issues?* And, *How many adults do you have in your life who you spend time with and who make you feel good about yourself?*).

There was a significant group by ACE interaction at the trend level predicting an increase in positive social support, after controlling for pre-test social support and the other covariates. That is, youth in the Fourth R and the comparison group who had a low ACE score, and youth in the Fourth R group with a high ACE score had similar increases in positive social support. However, those in the comparison group with high ACE scores reported much lower access to social support. Marginal means were generated to compare the four different groups (i.e., the effects of age, sex, and ethnicity were partialled out). Figure 3 below shows these group means and indicates that the significant subgroup differences are between the high ACE comparison group and all the other groups. Note that in this figure higher scores are better (i.e., opposite to the negative attitude items).

Figure 3: Youth Access To Positive Social Support Compared To ACE Score and Intervention Group



** = significant at $p < .01$ level, * = significant at $p < .05$ level, ^ = trending toward significance at $p < .10$

Section 2: Key Findings of Curriculum Implementation

Overall, teachers and students enjoyed using the Fourth R curriculum. Information about the implementation of the Fourth R curriculum was collected using a variety of qualitative tools, as described in the accompanying Technical Report. Findings in this section highlight:

- Varying teacher implementation styles and degrees of lesson interactivity at different school sites;
- Issues each school may experience when attempting to sustain the Fourth R curriculum.

Teachers Were Positive About Their Experience Using the Fourth R

In all six of the interviews with teachers who had previous health class experience,¹⁷ teachers preferred the Fourth R to other health curricula. One teacher said that compared to other health curricula, the Fourth R is much more empowering for youth. Teachers also noted that the Fourth R curriculum is more realistic than other health curricula in terms of relating to experiences that teens are dealing with on a regular basis.

“I love it, especially for a first-year teacher. It’s super user friendly.”

- Fourth R Teacher

“The health curriculum previously taught, caught some of these points, but nothing was structured. The other thing is it didn’t really give time to the development of skill sets – which is what [Fourth R] is all about.”

- Fourth R Teacher

Students’ Experiences of the Program Varied, in Part Due to Differences in Implementation

Students reported a range of experiences with how their teachers implemented the Fourth R and the prescribed content in the program. Most students enjoyed the interactive activities and felt like their teacher was comfortable teaching the content. Other students, however, would have liked to have had more open conversations about some of the issues, including sexual assault, drugs and alcohol.

“I like the role-playing. The role-playing really helps you to understand how to do things in real life... how you do the assertive and passive and how you do things around people.”

- Fourth R Student

Interactivity: Overall, most students agreed that the Fourth R is an interactive class, second only to physical education. Many students enjoyed the role-play activities throughout the curriculum and thought they were realistic examples to practice for real life. However, some students disagreed, and wanted more realistic examples or felt the role-plays were too embarrassing. Students also spoke positively about the numerous opportunities in the class to have

¹⁷ Two teachers were interviewed in both implementation years evaluated and two schools had more than one teacher implementing with the same students.

open discussions about relationships, substance abuse and healthy sexuality through different activities.

Impact on Students and Teachers: Several teachers spoke about how their experience teaching the Fourth R improved their comfort in providing interactive opportunities for students. A few of the teachers had not implemented lessons that included a high level of interaction in the past and were more comfortable with the videos and the handouts (as opposed to role plays) when they began implementation. However, for at least two of the teachers, this changed towards the end of the class, as they became more prepared and practiced. The curriculum also gave teachers an opportunity to have “real” conversations with their students, and they felt like it was empowering for students, unlike other subjects they had taught.

“I’m just really enthralled. I think the Fourth R has completely changed the way I’ve taught. I really enjoy it. It’s reinvigorated me... But it’s important, and you know, I’m getting older and I see enough stuff going on. To me, this is so much more important than anything else going on in this school. I don’t care if kids are taking AP classes or advanced math classes or English or Honors English. It’s just – if they don’t have the relationship, it just really doesn’t matter.” - Fourth R Teacher

Teachers Perceive Good Opportunities for Sustainability of the Fourth R

In six of the ten teacher interviews, teachers believed the Fourth R curriculum would be sustainable at their school. Some teachers mentioned that the support of the school board was key in the initial, as well as ongoing implementation efforts, and two others spoke about the vital role of parent and community support.

“So once I started using [the Fourth R], we went to curriculum review and parents came in and we got input and people were completely supportive, because they understood that it was skill-based, and you had clinicians, you had parents. It’s like this is what all of our kids need. It just makes common sense. It’s like this is the way to go.” - Fourth R Teacher

Overall, teachers were satisfied with the training and technical assistance provided by Fourth R Master Trainers and staff from the Department of Education & Early Development, the Division of Public Health and the Alaska Network on Domestic Violence and Sexual Assault. However, some teachers requested on-going training or boosters, while others stated they would like to be more engaged with other teachers who were implementing the Fourth R, in an effort to support each other’s implementation and to share ideas.

Three Case Studies Highlighting Fourth R Implementation Experiences

In order to provide a more nuanced story of what implementation looks like in Alaska schools, a case study approach was used to highlight three different experiences. Three implementation schools are highlighted, in order to tell a deeper story of the distinct implementation strengths and challenges experienced by Fourth R sites in Alaska. Schools were selected based on the emerging themes identified when determining the implementation quality category, explained in the Technical Report. Themes included: Dosage and lesson completion, interactivity, teacher comfort and confidence in teaching Fourth R content, including facilitating skill-building and activity-based exercises, and teacher and student perceived behavioral impact and knowledge improvement. The Evaluation Team also took into consideration themes drawn from the reported real-life applications of skills and knowledge retained by student participants, as well as students' reported enjoyment of the curriculum. While these case studies are not easily generalized to all Alaska communities, as they do not represent every vast region that was part of this evaluation study, these three schools provide a snapshot of the typical implementation experiences of schools in this evaluation project.

To guide the process of building the three case studies, the following research questions were asked:

- 1) How does the experience of the Fourth R differ for students when teachers complete prescribed lessons in their entirety, utilize optional and prescribed interactive components, and feel comfortable and prepared to implement the lessons?
- 2) How do students express their knowledge and utilization of skills as a result of their Fourth R experience when teachers engage students with safe and empowering methods?

In addition, the following propositions were explored:

- 1) Students who are able to practice interactive learning methods would express greater satisfaction of program experience; and,
- 2) Students who experience the Fourth R in its entirety would express greater retention of program outcomes relating to knowledge and skills.

Evaluation Team members used a descriptive case study¹⁸ approach to showcase the implementation of the Fourth R in Alaska communities in the real-life context in which it occurred. Unfortunately, it was not possible to do an explanatory case study¹⁹ to explain the link between program implementation and program effects, due to the small number of student participants from individual schools. However, the three case studies can be used to better understand the implementation experiences of teachers and resulting student retention of knowledge and skills that were discussed in youth focus groups²⁰.

The three schools chosen to represent Fourth R implementation experiences in Alaska shared common successes and challenges with schools not selected for this case study. Table 6 summarizes information about the three schools highlighted in this case study.

Table 6: Distinguishing Features of Three Case Study School Classrooms

¹⁸ Yin, R. K. (2009). *Case study research: Design and methods* (Vol. 5). Sage Publications. Thousand Oaks, CA.

¹⁹ Yin, R. K. (2009). *Case study research: Design and methods* (Vol. 5). Sage Publications. Thousand Oaks, CA. An explanatory case study method would have been ideal to explain presumed links between implementation styles and program outcomes, however that was not possible given the small sample size.

²⁰ The focus group questions did not measure behavior, attitude, or knowledge change. Rather, they focused on the experience that the student had with the curriculum, including retained information.

	School A	School B	School C
Implementation	Fall 2012	Fall 2012	Spring 2012
Lesson Tracking	2/3 Units tracked	3/3 Units tracked	No information
Program Completion	3/3 Units completed ²¹	3/3 Units completed ²²	Unit 1 Completed ²³
Interactivity²⁴	Highly interactive	Interactive on a regular basis	No record Not interactive on a regular basis ²⁵
Modifications	Several modifications Increased interactivity Health teacher implemented	Few modifications Maintained program interactivity Health teacher and guest from local DV agency implemented	Created a packet of printed materials for each student Integrated Fourth R lessons on drugs and alcohol into other parts of health class
Sustainability	Fourth R is now the required health curriculum district-wide for next 5 years	Administrative support Teacher and local agency ownership and buy-in	Administrative support Teacher buy-in and intention to attend more training

All three schools implemented and participated in the evaluation project and varied along the following distinguishing features: (1) two separate implementation semesters; (2) different levels of completion of lessons and lesson tracking, representing different levels of buy-in and commitment to the fidelity monitoring process; (3) differing levels of interactivity in implementation styles; (4) different decisions on modifications made to Fourth R content; and (5) distinctive hope for the sustainability or institutionalization of the Fourth R in the school or district.

²¹ Some activities skipped because of time.

²² Some activities skipped because of time.

²³ Lesson tracking was not completed, information is from interview data. There were two teachers implementing in two different classrooms. Unclear how much of the curriculum was completed by each teacher.

²⁴ Teachers were asked to assess their average level of interactive prevention activities in their health curriculum implementation when completing the Prevention Tracking Forms with Evaluation Team members. Teachers were given a 1-4 scale where: 1=*not at all interactive*; 2=*sometimes interactive, sometimes not*; 3=*interactive on a regular basis*; and 4=*highly interactive*. Teachers were also given examples of activities at each level.

²⁵ Prevention tracking data was not collected from Cohort 1 teachers, so there is no self-assessed interactivity data for this school. The description of “not interactive at all” was given to the school after interview and focus group data were assessed.

CASE STUDY: SCHOOL A

Description of interaction: The teacher at School A described the implementation as highly interactive and remarked that his/her class, in general, is “rarely lecture-based.” During Fourth R implementation, every class period had interactive activities, ranging from class discussion, movement-based content, group work or individual projects. Often the class was broken up into small groups to facilitate the discussion-based activities (e.g., Unit 1/Lesson 1/Activity 1/Option 2: *Communication Line Strategy*, etc.). Some lessons were turned into “games” where students would call out the answers, such as with Unit 1/Lesson 1/Activity 2 *Power Imbalances*. Other lessons were adjusted to be movement-based, such as Unit 1/Lesson 1 *Comfort Zone*, where the teacher had students walk to a “comfortable” area in the hallway to demonstrate their level of comfort with their peers during particular scenarios (e.g., cheating on exams vs. yelling at a friend).

Content Modifications: Several of the curriculum-designed activities were adjusted to become more active/movement-based. In addition, more technology-based activities (internet research, iMovies, etc.) were incorporated into the group and individual activities, including students using their own music as examples of the representation of violence in popular culture. The teacher spent extra time developing complimentary additions to some Fourth R lessons to increase the relevance of the health issues to students (e.g., incorporating popular culture examples for how health issues may affect fictional characters with whom most students are familiar). The teacher also experimented with different methods of delivery, such as creating animated cartoons to describe some of the lessons.

Preparedness and Comfort with Fourth R Implementation: The teacher did not have a background in health education, but took a personal interest in offering such a course at the school, and subsequently sought out the Fourth R training with administrative support. The teacher was very energetic and supportive of the opportunities the Fourth R curriculum provided for engaging students and was comfortable providing feedback about activities and suggestions for improvements. The teacher took time to prepare outside of the class period, in order to identify innovative methods for lesson delivery and relevant media examples the students would be more easily able to connect with.

Student attitudes about Fourth R: The majority of student participants in the focus group at School A reported that they enjoyed participating in role-plays and “performing in front of others.” There were some students who were hesitant and embarrassed to perform, but this seemed due to the prescribed nature of the scenarios. As one student explained, “Oh, it was kind of awkward, kind of. Because it’s different from like if it was a real situation...” Students also enjoyed the openness of discussions, with one student remembering, “It was cool to see everyone’s different opinions.”

Topics, Skills and Knowledge Most Retained by Students: Topics related to bullying and communication skills were most memorable to the students at School A. In particular, they recalled group discussions of bullying and teacher proposed skill-building scenarios for how to negotiate bullying situations. Students also shared their experiences working through scenarios and being called on by their teacher to step up and demonstrate their example of how to deal with unhealthy relationship scenarios. Several students recalled improved negotiation skills and “how to build a healthy relationship.”

Challenges: One of the challenges for this school’s implementation was time. This teacher was unable to complete all lessons prescribed by the program due to limited class time, and also had trouble finding the time to track lessons for fidelity monitoring purposes.

Successes: This teacher was able to complete the majority of lessons in each of the three units. This teacher also spoke in-depth about the importance of skill-building activities and how integral they are to ensuring a successful program impact on students, and his/her implementation style reflected that

belief. Student comments and the teacher observations showed clear evidence that students in this class had developed a shared language to talk about healthy relationships, violence prevention, and effective communication. Some students also shared an increase in confidence when it came to communication in relationships and conflicts with friends, particularly in regard to negotiation skills. As a result of Fourth R success and buy-in from school decision makers at this school, Fourth R is now the required health curriculum at the 9th grade level for this district for the next 5 years.

CASE STUDY: SCHOOL B

Description of Interactivity: The lessons that the teacher implemented out of the prescribed content of the Fourth R were self-reported as “very interactive.” According to the teacher, some students responded better than others to interactive components, with some students becoming too “busy” or distracted during interaction. To remedy these differences, students exhibiting distraction were given activities that were handout-based. The teacher reported, however, that the majority of students preferred interactive activities, especially the role-play and graffiti exercises. Overall, this teacher maintained the identified level of interactivity in the content throughout the delivery of the Fourth R curriculum.

Modifications: The teacher subtly adjusted the lessons as needed to engage the students and capture their attention. Many of the modifications simply involved steering the group discussions in a direction such that the students could more easily grasp the concept. For instance, if students did not connect with the examples provided in the Fourth R content, the teacher would guide them through a problem-solving discussion to identify more relatable examples and realistic solutions that the students could agree upon. Additional modifications included inviting guest speakers to facilitate full or partial lessons that were part of the speaker’s professional field of specialty.

Preparedness and Comfort with Fourth R Implementation: The teacher had an educational background in health and physical education, as well as experience implementing former versions of the Fourth R in the previous school years, and pursued the annual Fourth R booster trainings offered by the Department of Education to remain relevant and up-to-date, as well. However, the teacher did note that each newly adapted version of the Fourth R received required additional semesters of teaching to get back up to the previous comfort level with facilitating the lessons. The teacher reported that each time s/he implemented a lesson it became easier, but that s/he still needed to prepare the day before and morning of class to ensure readiness.

Student Attitudes about Fourth R: Students from School B appreciated the safe setting and opportunity to share opinions, and also appreciated learning more about what their fellow peers thought about issues surrounding substance abuse, friendship and peer pressure. However, most students reported that they were not fond of the role-play activities, because of the prescribed scenarios; specifically, they were uncomfortable making up responses to proposed life events. However, despite being out of their comfort zone with the role-plays, all students participated.

Topics, Skills and Knowledge Most Retained by Students: The students in the focus group found the interactive activities most memorable, such as the “Four Corners” activity, where students discussed opinions about substance use. The students described this activity as giving them the opportunity to listen to other peers’ opinions, consider their own, and then move to different areas of the room to reflect their own belief changes based on the honest debates. The students also recalled lively discussions and role-plays surrounding substance abuse and general peer pressure. As said by one student, “Yeah. Whatever group you went to, you talked about like what your opinions were on it, and then we always shared – what we thought – and we agreed with them and talked about it and

everything.” However, the students in the focus group reported that during their role-play of personally scripted performances, they did not feel they received much attention from their peers for feedback, as most students were more focused on creating their own responses for their upcoming demonstrations. Students also recalled aspects of healthy sexuality and healthy relationships. For example, as reported by one student, “I have not experienced that and now by knowing how to stay in a good positive relationship it can be much helpful in future times.”

Challenges: This teacher also ran into problems with time and was not able to complete all lessons prescribed in the content of the program. However, this teacher was able to complete the entirety of the lesson tracking for fidelity monitoring purposes. This teacher also spoke about a growing confidence in his/her teaching and implementation skills, but also discussed that this confidence had been hindered by adaptations and new versions of the Fourth R that were being introduced every year. As a result, the teacher had to use time outside of class (after hours or in the mornings) to prepare for the lessons and to feel equipped to be effective with students.

Successes: This teacher was able to complete all three units, with only a few lessons missing. This teacher’s comfort with the program content has since improved, specifically when considering confidence with skill-building activities like role-plays. Students’ experiences reflected this growing comfort, with reports that the class became an open space to talk about important issues. Some of the students were uncomfortable with the role-plays and other activities, but most saw the benefit and felt like practicing would be beneficial for real life. Students also reflected on their own increased confidence in experiencing healthy relationships in the future and their ability to communicate effectively, with several students specifically speaking about navigating decisions around substance use. In terms of sustainability, this school has administrative buy-in and the teacher, as well as the local DV agency, is on board to continue implementation in years to come. In subsequent years, the teacher would like to see more engagement from parents and other staff members.

CASE STUDY: SCHOOL C

Description of Interaction: One teacher²⁶ at School C implemented the Fourth R by creating a packet of printed handouts from the curriculum for students to complete individually. The other teacher spoke about using interactive techniques if students did not seem to be paying attention; otherwise, the handouts, videos and prescribed content/activities were used (note that the latter teacher did use some of the Fourth R’s interactive methods when teaching other subjects in health class, but did not always use interactive methods in the prescribed activities for the Fourth R). Students participated in role-plays for one unit, however, some of these role-plays were only read by students in their packets while a few students completed the role-plays live.

Modifications: This school did not complete the implementation of the full curriculum during this semester and there are few detailed records of specific modifications made. However, according to focus groups and interviews, the teacher at this school who created the packet to hand out followed the lessons for the first unit where time allowed. The other teacher selected relevant lessons from Unit 3 on drugs and alcohol, but not all and not in order.

Preparedness and Comfort with Fourth R Implementation: One of School C’s teachers was uncomfortable with some of the role-play activities, but liked the provided videos that highlighted examples of how students could do the role-plays. The other teacher felt like they would be more comfortable with implementing the skill-building activities if there was more time dedicated to

²⁶ Two teachers implemented different components of the Fourth R at School C.

practicing in the Fourth R teacher trainings. It is unclear from data collected if the teachers at School C were uncomfortable with Unit 2, which focuses on healthy sexuality, but from the limited lesson tracking data, it does not appear that any of the lessons from Unit 2 were taught.

Student Attitudes about Fourth R: It was difficult for students from School C to differentiate between Fourth R lessons and regular health and physical education classes. When asked what lessons from the Fourth R program they were most likely to use in real life, several students brought up CPR and the Heimlich maneuver, neither of which are a part of the Fourth R curriculum. Some students did mention “saying no to drugs and alcohol,” but did not mention specific communication or negotiation techniques from the Fourth R. Some students felt like the class was boring; they watched a lot of videos of other students doing the role-plays and completed worksheets. Students spoke about wanting more “hands-on activities” to be added to the class.

Topics, Skills and Knowledge Most Retained by Students: During the focus group for School C, students mostly talked about first aid lessons, which are not a part of the Fourth R curriculum. A couple of students did remember talking about drugs and alcohol and violence, like bullying, but the majority of the conversation was about CPR.

Challenges: Although this school has less recorded data than the two other case study examples, it seems clear that the teachers were less prepared and implemented the Fourth R with less fidelity than how it is intended to be taught. This may be because of time or comfort; the answer is unclear from existing data. One of the reasons for this clarity issue is the lack of participation in lesson tracking.

Successes: One of the teachers had witnessed students using shared language in the hallways that reflected lessons from the Fourth R, particularly around bullying and prosocial bystander behaviors.

DISCUSSION & RECOMMENDATIONS

In this study, we found promise in the use of the Fourth R curriculum to improve youth awareness of dating abuse, attitudes related to different types of violence, and improved positive social support, particularly among the most vulnerable youth. Due to limitations in the data that are described in more detail in the accompanying Technical Report, we did not find as many statistically significant differences as we had expected. However, the analysis of qualitative data uncovered many positive findings about the impact of the Fourth R. Furthermore, the positive differences demonstrated with the quantitative analyses were all corroborated by the qualitative data. Overall, participants and teachers of the Fourth R reported positive impacts in youth applied knowledge, attitudes, behavioral intentions, help-seeking and social support.

Youth who participated in the Fourth R were statistically significantly different than comparison group youth in:

- ✓ Improved awareness of abusive behavior
- ✓ Reduced adherence to rape myths
- ✓ Increased positive social support among youth with high ACE scores

And were trending toward statistical difference in:

- ✓ Reduced acceptance of physical aggression

It is notable that the Fourth R seems to have a statistically significant effect on youth who report having experienced a higher number of adverse childhood experiences (ACEs). Specifically, youth with higher ACEs who participated in the Fourth R were less likely to endorse rape myths, and more likely to experience an increase in positive social support. Recent research has indicated that marginalized youth can benefit from youth-adult partnerships that promote interactions that contribute to resilience and allow youth to help navigate and negotiate life more effectively²⁷. These adult-youth relationships facilitate prosocial expressions of personal skills that translate into adaptive behavior among youth who face multiple risk factors. Resilience is a result of the quality of their engagement with the adult and not a personal trait²⁸.

A recent review of teen dating violence prevention programs²⁹ concluded that there is a need for evidence on the efficacy of interventions that are not based on group delivery (universal programs). Our preliminary finding that the Alaska Fourth R curriculum may be most impactful for youth with a higher number of adverse childhood experiences points to the possibility that the Fourth R may be most efficiently implemented with youth that present at baseline as “higher risk” or with more adverse life experiences.

It is likely that a lack of statistical significance with many of the outcomes can be attributed to methodological challenges, rather than the actual impact of the Fourth R curriculum. The statistical trends toward significance of some of the student survey items, and the bulk of positive feedback from qualitative data show that findings may improve with better methodology. Future evaluations would benefit from a larger sample size at follow-up so that behavioral outcomes can be analyzed, better survey questions to measure applied knowledge and behavioral intentions, and more consistent implementation of the curriculum across communities.

²⁷ Ungar, M. (2013). The impact of youth-adult relationships on resilience. *International Journal of Child, Youth and Family Studies*, 4(3), 328-336.

²⁸ Ibid.

²⁹ Leen, E., et al., Prevalence, dynamic risk factors and the efficacy of primary interventions for adolescent dating violence: An international review, *Aggression and Violent Behavior* (2012), <http://dx.doi.org/10.1016/j.avb.2012.11.015>.

In determining the implementation quality category to test for program effects and in showcasing the three case studies, it is clear that schools with higher implementation quality (i.e. more lessons completed and higher levels of interactivity, teacher comfort and preparedness) resulted in more knowledge retention, greater satisfaction of the program and more behavioral intentions in students. Conversely, schools with lower implementation quality resulted in less student knowledge retention and fewer examples of a shared language around healthy and unhealthy relationships and effective communication skills. It is clear that merely distributing handouts and speaking about key components of the Fourth R (e.g. healthy relationships, effective communication and refusal skills) is not as effective as facilitating applied hands-on activities that engage students in skills practice in the classroom. Students with teachers who report a greater degree of confidence in their ability to teach all lessons, and thus tend to conduct the activities as they are designed, are likely to experience greater satisfaction with the program overall. Specifically, students who are able to practice interactive learning methods expressed greater satisfaction with their program experience, as well as greater retention of key Fourth R concepts like healthy relationships and communication skills. Conversely, students who experienced less complete versions of the Fourth R or had fewer opportunities to practice new skills did not appear to retain the intended information.

Based on this observation of variable implementation quality, we recommend that:

- Teachers who implement the Fourth R complete all prescribed lessons with priority given to interactive content, including role plays and other applied skill-building activities;
- Teachers prepare lessons ahead of class time;
- Teacher modifications or adaptations should maintain or increase interactivity;
- Fourth R Teacher training consists of extensive applied activity facilitation practice;
- Fourth R Teacher training is followed by timely continuing education and boosters;
- Fourth R Teachers are given a platform to network and collaborate with each other;
- And, Fourth R schools engage school faculty, staff and parents/caregivers of students in Fourth R content to reinforce messages received by students and to garner support for the sustainability of efforts and program implementation.

NEXT STEPS

This evaluation study was a success in many ways. It would not have been possible without funding and support from CDVSA and in kind and monetary support from multiple organizational partners. It is exciting to see the number of positive findings that resulted from the study. Future Fourth R evaluation efforts would bode well with the following recommendations:

- ✓ *Enhanced focus on targeted populations.* This study showed that the Fourth R has a differential impact on youth who have experienced more adverse life events. Future evaluations should consider focusing on the impact of Fourth R within alternative school settings, within village settings and with populations of youth that may score high on ACEs.
- ✓ *Improved control over program implementation.* Although it is hard to coordinate the involvement of multiple communities across a state, it is possible to have more control over when a curriculum starts or ends, and the content that is required for implementation. Future evaluations should work closely with implementation partners to ensure more control over when and how the curriculum is implemented so that the study more accurately tracks program outcomes. There is work starting in Canada and the authors of this study report have experience conducting capacity assessments of schools and organizations to determine

their readiness to implement curricula such as the Fourth R. Future evaluation efforts could focus on testing under what conditions Fourth R is more adequately implemented, and what capacities are needed to successfully implement and sustain the Fourth R.